



Features

- ✧ For IF SAW filter
- ✧ High attenuation
- ✧ Single-ended operation LBN140
- ✧ Dual In-line Package
- ✧ RoHS compliant (2002/95/EC), Pb-free

Specifications

Specifications

Parameter		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	139.85	140	140.15
Insertion Loss		dB	-	26	29
3 dB Bandwidth		MHz	9.75	9.81	-
Passband Variation		dB	-	1.1	1.5
Absolute Delay		usec	-	3.6	4
Ultimate Rejection	$f_0\pm 5.3\text{MHz}$	dB	35	40	-
	$f_0\pm 5.5\text{MHz}$	dB	45	55	-
	$f_0\pm 5.9\text{MHz}$	dB	50	58	-
	$f_0\pm 9.9\text{MHz}$	dB	55	60	-
Material Temperature coefficient		KHz/°C	-13.16		
Substrate Material		-	YZ LN		
Ambient Temperature		°C	25		
Operating Temperature Range		°C	-40	-	+85
Storage Temperature Range		°C	-45	-	+105
DC Voltage		V	0		
Input Power		dBm	-	-	10
ESD Class		-	1A		
Package Size		DIP3512 (35.0x12.8x4.7mm3)			

Notes:

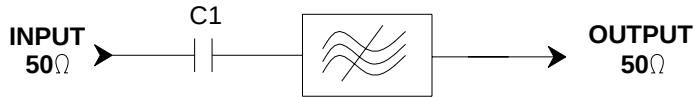
1. All specifications are based on the test circuit shown;
2. In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances;
4. This is the optimum impedance in order to achieve the performance show.



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Part Number	LBN140A08	
Rev. Date	2008-03-06	
Ver.	1.0	Page 1/3

Matching Configuration

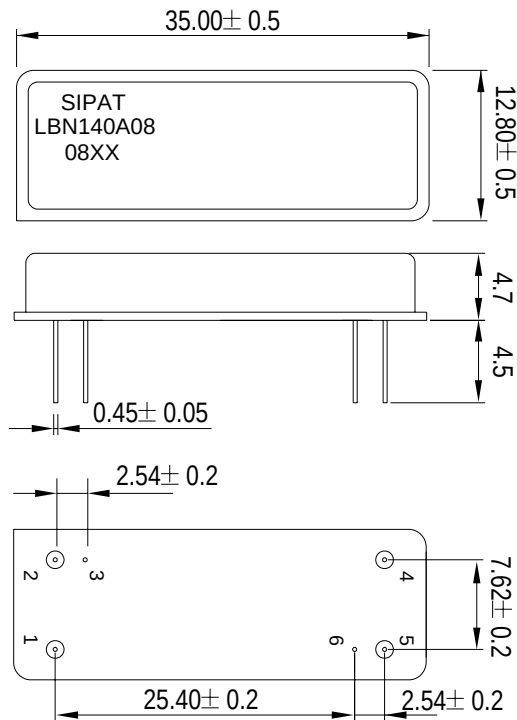


C1=18pF

Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input 1
Output 5
Ground All Others

Marking Configuration:

- 1) SIPAT: Manufacturer Name
- 2) LBN140A08: Part Number
- 3) 08XX: Date Code

Package: DIP3512

Unit: mm



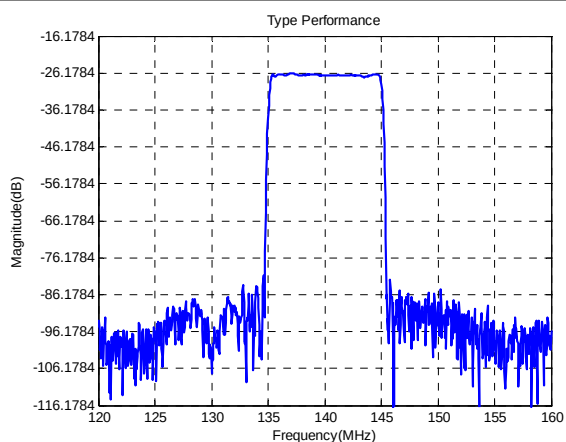
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Typical Performance

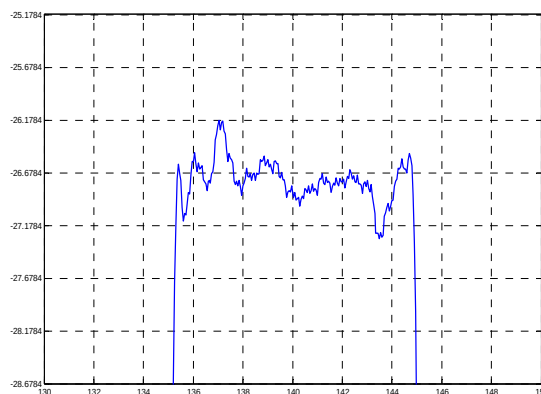
Frequency Respond



Horizontal: 5MHz/Div

Vertical: 10dB/Div

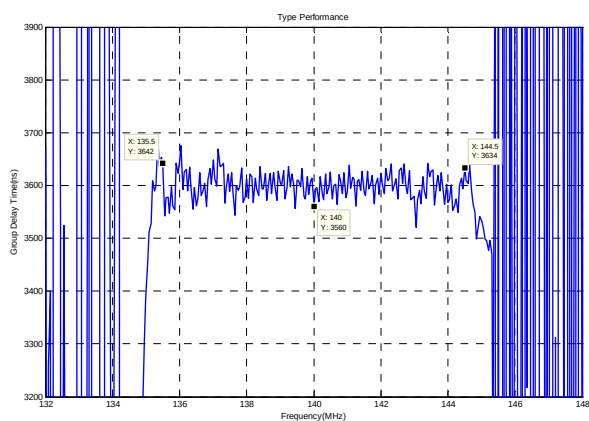
Passband Respond



Horizontal: 2MHz/Div

Vertical: 0.5dB/Div

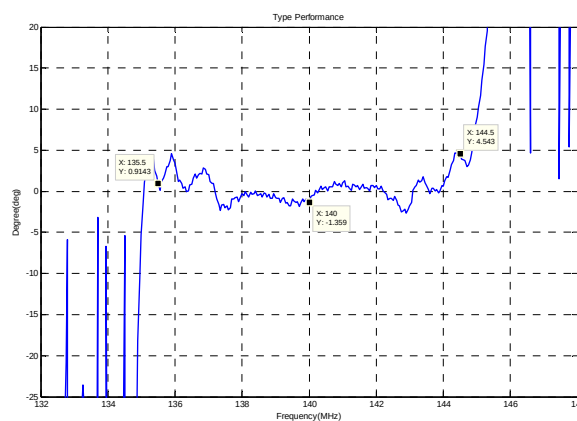
Group Delay Variation($f_0 \pm 4.5\text{MHz}$)



Horizontal: 2MHz/Div

Vertical: 100ns/Div

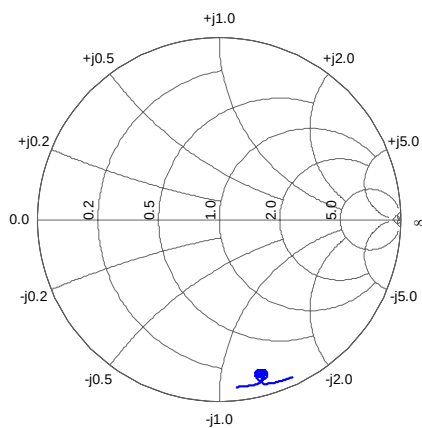
Phase Linearity($f_0 \pm 4.5\text{MHz}$)



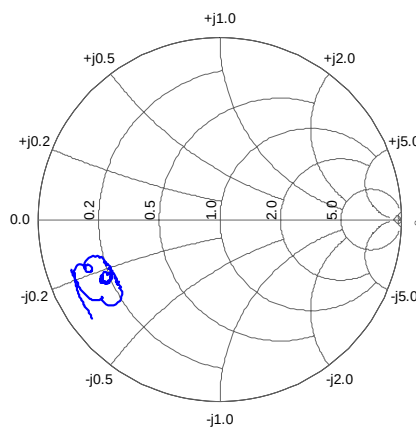
Horizontal: 2MHz/Div

Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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